

Marine Corps Seabasing Capabilities

Today and Tomorrow

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SEABASING CAPABILITY



LHA-8

Lifts and supports over 1300 Marines and the MAGTF command & control nodes- is main base to fixed (JSF), rotary wing / tilt rotor, and unmanned aircraft systems. Well deck supports simultaneous landing craft operations. Level II medical capability.

LPD-17

Capable of basing over 700 Marines, their equipment and supplies and projecting capabilities ashore with LCACs, conventional landing craft, amphibious connectors and rotary lift craft.

LSD

Provides largest capacity to operate landing craft in support of MAGTF operations.

Ship to Shore Connector (SSC)

Provides modernized landing craft over-the-beach capability.

JHSV

Provides high speed transportation for over 300 Marines and 20,000 sq ft of MAGTF equipment.

LMSR

Military Sealift Command's (MSC) Large, Medium Speed, Roll-On/Roll-Off ship (LMSR) program significantly expands the nation's sealift capability as a prime mover of US military equipment. The ships carry vehicles and equipment to support humanitarian missions, as well as combat missions.

Mobile Landing Platform

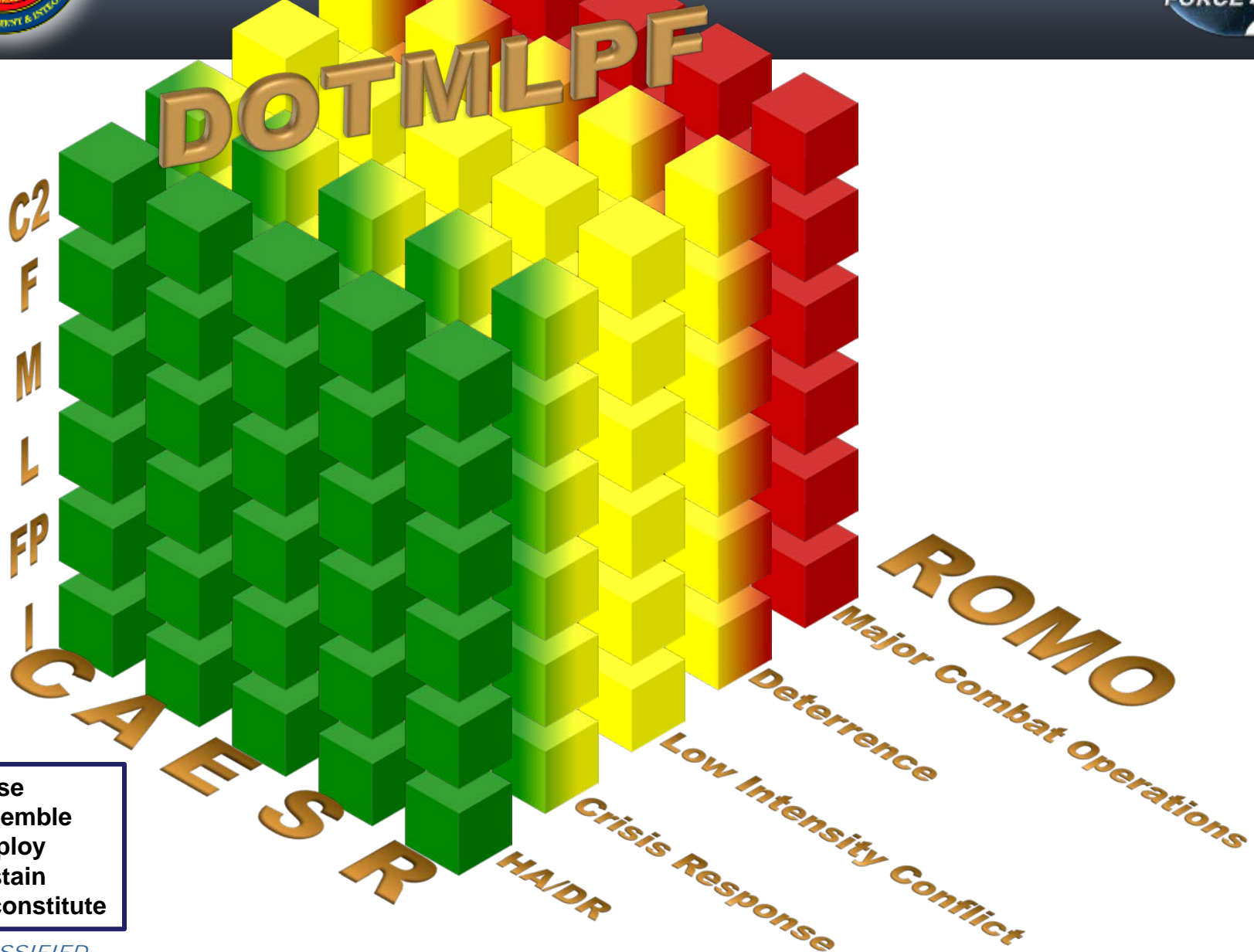
Leverages float-on/ float-off technology and has raised vehicle platform, sideport ramp, mooring fenders and LCAC lanes. Utility of "Interoperable Pier in the Ocean" spans the Range of Military Operations.

In future crises, forward based and forward deployed amphibious and MPF forces will continue to demonstrate their inherent flexibility and utility by aggregating with surged forces to conduct engagement, crisis response or forcible entry operations.





SEABASING CAPABILITY DEVELOPMENT FACTORS



- Close
- Assemble
- Employ
- Sustain
- Reconstitute



Amphibious Warships



LHA 6



LHA 8



LHD



LPD



LSD





Maritime Prepositioning Capability



MPSRON 2 DIEGO GARCIA



SISLER



SEAY



STOCKHAM



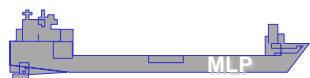
LEWIS & CLARK



BUTTON



LOPEZ



MONTFORD POINT

% of MEB 30-day requirement	
Square feet	71%
20-foot containers	61%
Fuel	37%
Water	13%

MPSRON 3 GUAM / SAIPAN



DAHL



PILILAAU



LUMMUS



SACAGAWEA



WILLIAMS



BOBO



GLENN

% of MEB 30-day requirement	
Square feet	67%
20-foot containers	67%
Fuel	50%
Water	15%

Average squadron capacity is 69% of MEB square-foot lift requirement



Mobile Landing Platform (MLP) *Artist's Conception...August 2009*



34 berths

Skin-to-skin ramp
and fenders

- LMSR skin-skin moored alongside MLP
- Vehicles transfer from LMSR to MLP via side port ramp and onto LCACs
- LCACs maneuver forces ashore

Utility Services
(limited) for
accommodation
barges/modules

FLO/FLO

25,000 ft²
elevated vehicle
stowage deck module

3 LCAC lanes
with services

15 knots,
9,500 nm

Tankage capacities
100,000 gal Potable Water/
380,000 gal JP5



Mobile Landing Platform (MLP 1) *Reality...June 2014*



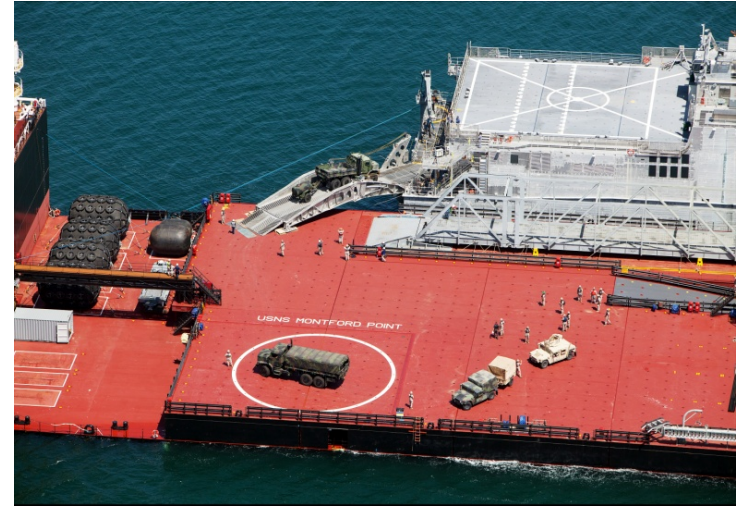


Mobile Landing Platform (MLP 1) *Reality...June 2014*





Mobile Landing Platform (MLP 1) *Reality...June 2014*





MPF T-AKE: Selective Offload Plus Operational Reach



T-AKE 1 & 2

USNS LEWIS & CLARK
USNS SACAGAWEA





MLP 3 Afloat Forward Staging Base *USNS Lewis B Puller...May 2014*

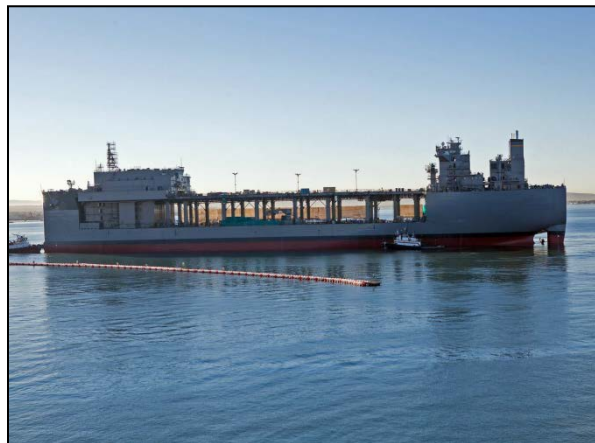


Keel Laying
November 2013



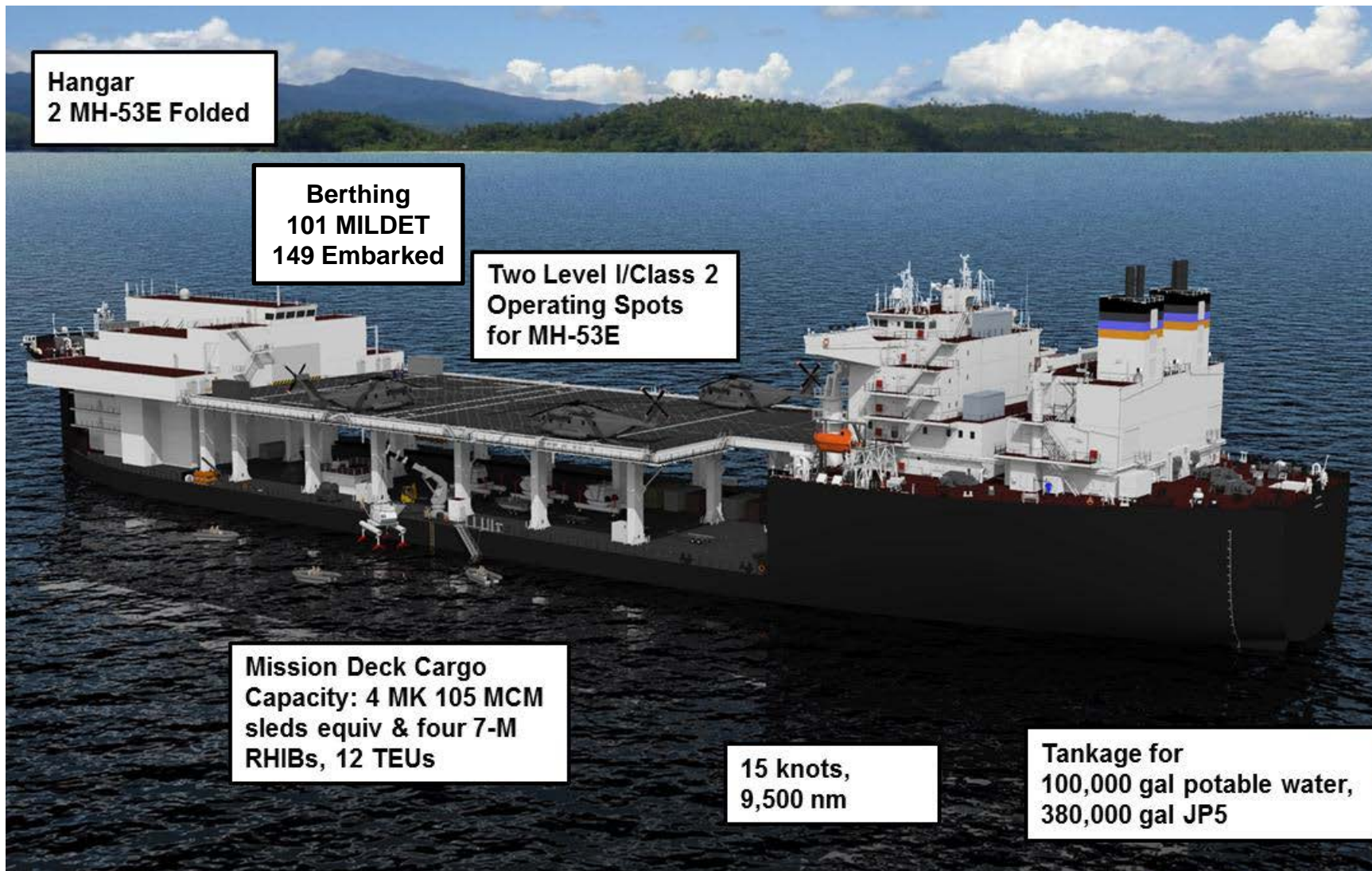


MLP 3 Afloat Forward Staging Base *USNS Lewis B Puller...Nov 2014*





MLP Afloat Forward Staging Base (AFSB) Capabilities



Hangar
2 MH-53E Folded

Berthing
101 MILDET
149 Embarked

**Two Level I/Class 2
Operating Spots
for MH-53E**

**Mission Deck Cargo
Capacity: 4 MK 105 MCM
sleds equiv & four 7-M
RHIBs, 12 TEUs**

**15 knots,
9,500 nm**

**Tankage for
100,000 gal potable water,
380,000 gal JP5**



MLP - AFSB Capabilities Comparison



MLP (MLPs 1 and 2)

- In-stream selective offload of Large, Medium Speed RO/RO (LMSR) in sea state 3 conditions
- Increased connector lift capacity
- Requires module augments for troop berthing & facilities



AFSB (MLPs 3 and 4)

- Maritime base of operations for MCM and SOF missions
- Accommodations and work spaces for up to 250 embarked personnel
- H-53 capable flight deck; pending V-22 certification





What is a “Connector”?



Connectors characterize the surface and vertical lift platform capabilities that are a critical component either organic to, or in support of, the sea base to transport personnel, supplies, and equipment within the sea base and maneuver them from the sea base to objectives ashore.







Derived From: *Seabasing Joint Integrating Concept (JIC), 2005*



Connectors

Surface & Vertical, Current & Future Platforms



	Current Platforms	Future/Possible Platforms
Surface Connectors	<p><u>USMC:</u> LCAC (SLEP) LCU JHSV</p> <p><u>US Army:</u> LCU-2000 LSV LCM-8</p> <p><u>Foreign:</u> LCAT (French)</p>   	<p><u>Programmed USMC:</u> SSC SC (X)(R)</p> <p><u>Emerging USMC Concepts:</u> Connector at-sea launch</p> <p><u>Future US Army:</u> MSV-L, MSV-M, MSV-H</p> <p><u>Prototypes/Demonstrators:</u> UHAC HAVIC Hoverbarge</p> <p><u>Designs:</u> LCU-F CAIMEN-90, CAIMEN-200 Air Supported Vessel</p> 
Vertical Connectors	<p><u>USMC:</u> CH-53E MV-22 KC-130J</p> 	<p><u>Programmed USMC:</u> CH-53K</p> <p><u>Emerging USMC Concepts:</u> Cargo UAS</p> <p><u>Designs:</u> Hybrid Airship</p> 



Surface Connectors



LCAC (SLEP)



Retains a high speed, OTH surface assault capability

*72 craft procurement starting in 2013
IOC FY 20*

- 60 ST at 35 kts
- Designed to carry M-60 tank
- Narrower performance envelope



SSC

- 74 ST at 35 kts
- Carries M1A1 with TWMP
- Full load in sea-state 3+ / 100F

LCU-1600



Recapitalizes a rugged, persistent, economical, high capacity landing craft

*32 craft procurement starting in 2018
IOC FY 22*

- <140 ST / 1200 NM at 11 kts
- 2200 sq ft payload cargo



SC(X)R

- Min 170 ST / 1200 NM at 11 kts
- Min 2200 sq ft payload cargo

Recapitalization of primary surface ship to shore connectors



Joint High Speed Vessel



WPE/JHSV/HST Comparison

	WestPac Express	JHSV POR: 10 Vessels	HST POR: 2 Vessels
Overall Length	101m	103m	107m
Draft	4.3m	3.83m	3.7m
Cruise/Max Speed	36kts/38kts	35kts/43kts	40kts/42kts
Passengers	900	312	866
Vehicle/Cargo Capacity	33,000sqft 165 HMMWVS	20,000-22,000sqft 100-110 HMMWVS	31,000sqft 152 HMMWVS
Deadweight	790t	700t	800t
Range	1250nm	1200nm	1200nm

Extensive, yet flexible crew & troop accommodations with lounge, medical, and mess facilities



Crew-served weapon mounts fore and aft



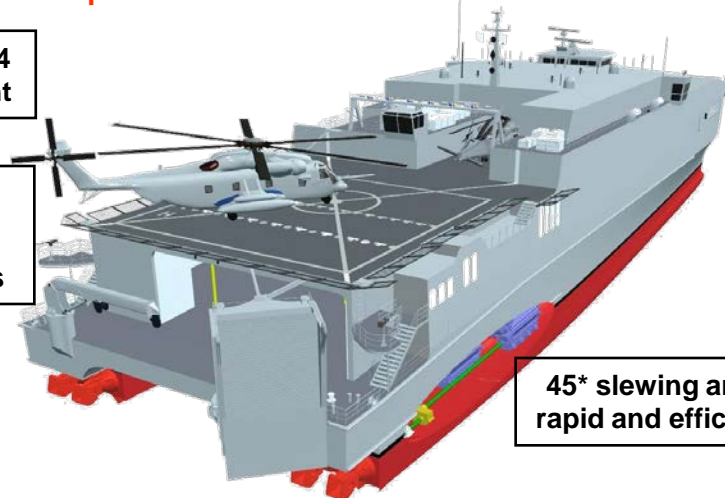
Large mission bay for range of military hardware, vehicles and boats; MTRV with trailer can do horseshoe turn

**** JHSV is not a combatant; operates in a permissive environment ****

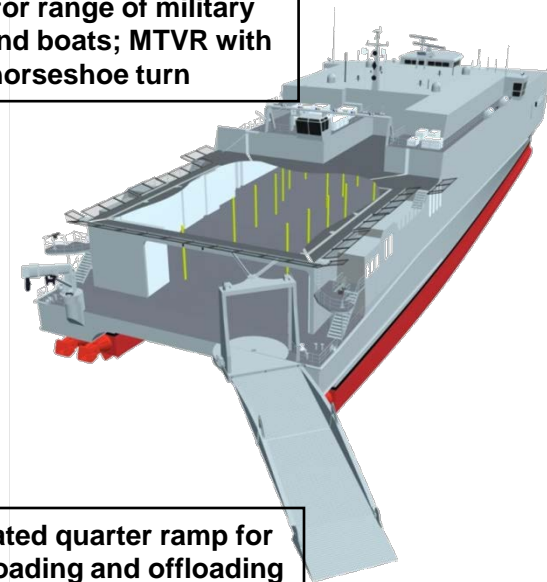
Supports 312 troops for 4 days or 104 troops 14 days without replenishment

Level I, Class 2 for H53/H60 helo operations

Level I, Class 4 VERTREP operations



45* slewing articulated quarter ramp for rapid and efficient loading and offloading





Seabasing Related Doctrine



- **Marine Corps**
 - Marine Corps Reference Pub (MCRP) 4-11C, Combat Cargo Ops (Notes: 1, 2 [SID])
 - MCRP 4-11.3G, Unit Embarkation Handbook (1, 2 [SID])
- **Navy**
 - Navy Tactics, Techniques, & Procedures (NTTP) 3-02.12, Naval Beach Group (NBG) Support Element Ops (3, 4 [SID])
- **Naval / Dual Designated**
 - Marine Corps Warfighting Pub (MCWP) 3-31A / Navy Warfighting Pub (NWP) 3-02.12, Employment of LCAC (1, 2 [N], 4 [SID])
 - MCRP 3-31.2A/NTTP 3-15.24, Mine Countermeasures in Support of Amphibious Ops (1, 2 [N], 4 [FMID])
 - MCWP 3-31.5 / NTTP 3-02.1M, Ship-to-Shore Movement (1, 2 [N], 4 [SID])
 - **MCWP 3-31.7 / NWP 3-62M, Seabasing (1, 2 [N], 4 [SID])**
 - MCWP 3-31.8 / NTTP 3-02.1.4M, Defense of the Expeditionary Strike Group (1, 2 [N], 4 [FPID])
 - MCWP 3-32 / NTTP 3-02.3M, Maritime Prepositioning Ops (1, 2 [SID], 4 [N])
 - MCRP 4-11.3D / NTTP 3-02.14 , The NBG (1, 2 [N], 4 [SID])
- **Joint / Multi-national**
 - JP 3-02, Amphibious Ops (1, 2 [N], 4 [SID])
 - JP 3-02.1, Amphibious Embarkation & Debarkation (1, 2 [SID], 4 [N])
 - JP 3-32, Command & Control for Joint Maritime Ops (1, 2 [N], 4 [SID])
 - ATP-8(B) Vol. I, Doctrine for Amphibious Ops (1, 2 [N], 4 [SID])
 - ATP-8(B) Vol. II, Tactics, Techniques, & Procedures for Amphibious Ops (1, 2 [N], 4 [SID])
 - ATP-24, MCM in Support of Amphibious Ops (1, 2 [N], 4 [FMID])

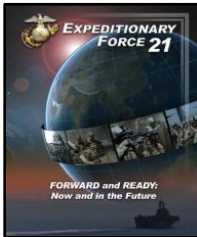
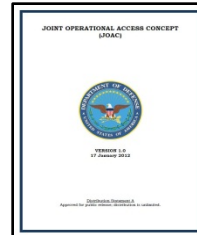


Doctrine Development Benchmark Documents



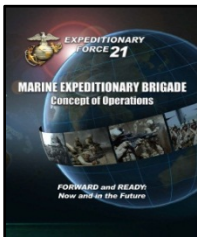
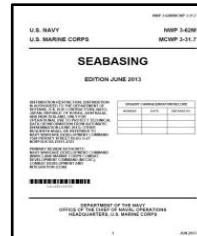
- Seabasing Concept of Operations for Low to Mid Intensity Operations

- Joint Operational Access Concept (JOAC)



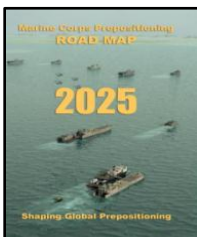
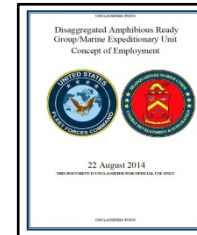
- Expeditionary Force 21

- MCWP 3-31.7 Seabasing



- EF 21 MEB CONOPS

- Disaggregated ARG/MEU Unit Concept of Employment



- Marine Corps Prepositioning Road Map 2025

Transitions to



- USMC Expeditionary Roadmap (2014 Draft)

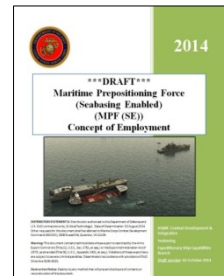
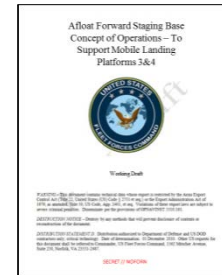
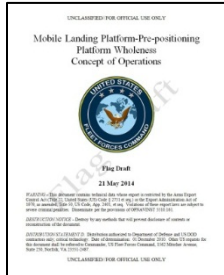




Doctrine Development Emerging Documents

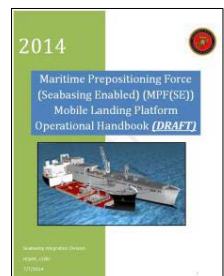
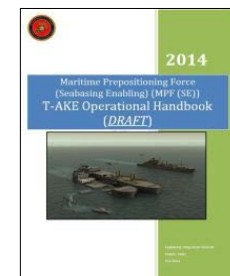


- **MLP - Prepositioning Wholeness CONOPS**
(Current draft (21 May 2014))
 - **Afloat Forward Staging Base (AFSB) CONOPS**
(Initial Working Draft (~Secret~))



- **MPF (SE) Seabasing Concept of Employment (Draft) ~**
In AO level staffing, Target signature by Spring 2015

- **T-AKE Operational Handbook (Draft) ~ Staffing Nov 2014-Spring 2015**



- **MLP Operational Handbook (Draft) ~ Staffing Dec 2014 - Summer 2015**



Seabasing...So What's Next?



Army Watercraft

	Landing Craft Utility 2000 (LCU 2000) 34 total (7 AC / 7 USAR / 20 APS)
	Logistics Support Vessel (LSV) 8 Total (5 AC / 3 USAR)
	Landing Craft Mechanized (LCM-8) MOD I and MOD II 44 total (11 AC / 15 USAR / 18 APS)
	Barge Derrick Crane (BD 115) 4 Total (0 AC / 2 USAR / 2 APS)
	Small Tug (ST-900) 16 Total (2 AC / 6 USAR / 8 APS)
	Modular Causeway System (MCS) 3 Total Systems (1 AC / 2 APS) - RORO Discharge Facility (RRDF) - Causeway Ferry (CF) - Warping Tug (WT) - Floating Causeway (FC)
	Large Tug (LT-800) 6 total (1 AC / 2 USAR / 3 APS)

UNCLASSIFIED



TODAY & TOMORROW'S SEABASING CAPABILITY

- LHA-8**: LHA and supports over 100 Marines and the MAGTF command & control center in main base to ashore (SB), rotary wing / tilt rotor and unmanned aircraft systems. Well deck supports simultaneous landing craft operations. Level II decked capability.
- LPD-17**: Capable of hosting over 700 Marines, their equipment and supplies and providing capabilities ashore with LCMs, conventional landing craft, amphibious connectors and rotary air craft.
- LSD**: Provides largest capacity to operate landing craft in support of MAGTF operations.
- Ship to Shore Connector (SSC)**: Provides modernized landing craft over-the-beach capability.
- EMSR**: Military Sealift Command's (MSC) Large Medium Speed, Roll-On/Roll-Off (LMSR) program significantly expands the nation's sealift capability as a prime mover of US military equipment. The ships carry vehicles and equipment to support institutional missions, as well as combat missions.
- Mobile Landing Platform**: Leverages float-on/float-off technology and has raised vehicle platforms, aircraft ramp, mooring tenders and LCM lanes. Utility of "Inseparable Five in the Ocean" plus the Range of Military Operations.
- TAKE**: Offers effective access and off load of military supplies for prepositioning MEB and other MAGTFs operating in the sea base or ashore.

In future crises, forward based and forward deployed amphibious and MPF forces will continue to demonstrate their inherent flexibility and utility by aggregating with surged forces to conduct engagement, crisis response or forcible entry operations.

UNITED STATES MARINE CORPS

Joint & Multinational Capabilities

- Amphibs
- C2
- Refuelers
- Medical
- Mine Sweepers
- ASW
- Air Defense
- Escort Ships
- Special Forces
- Search & Rescue

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Strategic Sealift Shipping

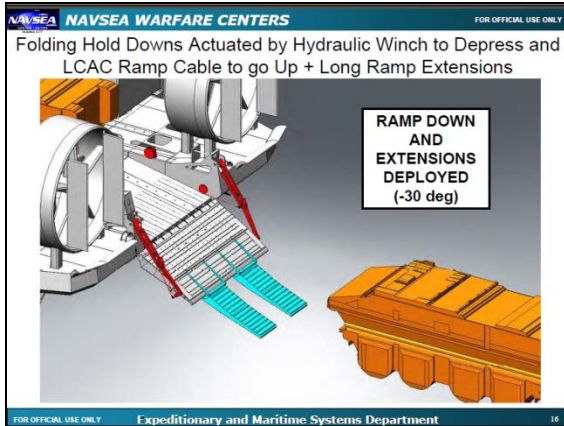
	SEABEE SHIPS		AUXILIARY CRANE SHIPS
	Float on/Float off heavy lift ships		LASH

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Near to Mid Term Possibilities

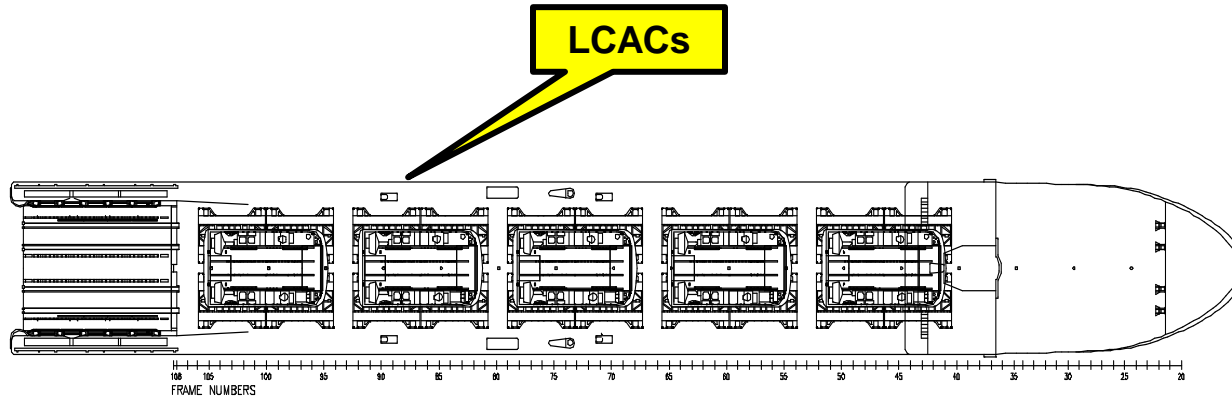




Possibility: Connector Station Ship



**Sea Barge (SEABEE) Cape May with elevator
in half-raised position**





Possibility: Connector Station Ship



SEABEE Barge Carrier SS Cape Mohican transports Navy Lighterage, LCAC, and Side-Loading Warping Tugs (SLWT) for Joint Logistics Over-The-Shore (JLOTS) 2008 Exercise.



Cape Mohican Underway



Possibility: Connector Station Ship



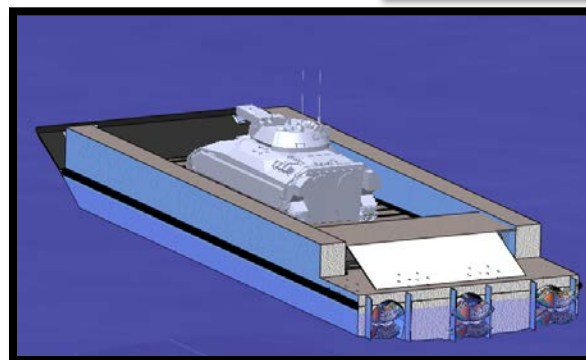
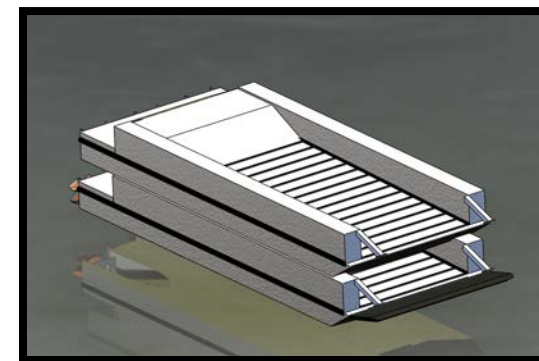
Two improved Navy lighterage system (INLS) craft from Amphibious Construction Battalion 1 stand by to descend on the elevator of the Military Sealift Command SS Cape Mohican during Pacific Strike 2008.



Possibility: High Speed Assault & Interdiction Craft (HAVIC)



- Aluminum transporter landing craft designed and built in 1985-86 as part of AAV AoA
- Tested with LAV in 1988 at Camp Lejeune
- LAV vehicle commander piloted the HAVIC via tele-operation
- Max speed at full load: 23.4kts in calm seas, 20kts in sea state 3
- Range: 80nm
- Stackable for transport & stowage
- Demonstrator scrapped in 1993
- Patent holder attended March 2014 Connector Summit & responded to Connector RFI





Seabasing: Assured Capability for Expeditionary Warfare



Amphibious Fleet



Connectors



Maritime Prepositioning Force



MAGTF



Task organized forces to meet CCDR mission requirements



Carrier Strike Group & Expeditionary Strike Group



Combat Logistics Force Ships



Coalition Force & Sister Service Ships

... mission drives organization



Seabasing Integration Division

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ROW WELL...AND LIVE!



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